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Product Information

Anti-FOXL2
produced in rabbit, affinity isolated antibody

Catalog Number **F0805**

Product Description

Anti-FOXL2 is produced in rabbit using as immunogen a synthetic peptide M(1)MASYPEPEDTAGT(14) corresponding to amino acid residues 1-14 from mouse FOXL2. This sequence is completely conserved in mouse and rat and 92% conserved in human. The antibody was affinity isolated on immobilized immunogen.

Anti-FOXL2 specifically recognizes mouse and hamster FOXL2 by immunoblotting (~39 kDa), indirect immunofluorescence, and immunohistochemistry.

FOXL2, also referred to as forkhead L2, is a winged helix/forkhead transcription factor that is highly conserved in human, goat, mouse, and certain aquatic species. Because of its cross-species conservation, FOXL2 appears to have a critical role evolution processes (i.e. in mammal ovarian differentiation and ovarian somatic cell differentiation and further follicle development and/or maintenance).[1-3] Data from immunohistochemistry shows that FOXL2 is a nuclear protein expressed in eyelids, fetal ovarian follicular cells, and adult ovarian follicular cells. FOXL2 does not undergo any major post-translational modifications. FOXL2 is also found to be associated with blepharophimosis/ptosis/epicanthus inverses syndrome (BPES).[2] There are two forms of BPES. Type I BPES show eyelid abnormalities that are associated with ovarian failure. In type II BPES, only eyelid defects are found. Studies have shown that FOXL2 is expressed in the mesenchyme of developing eyelids and in adult ovarian follicles.[4]

Reagent

Supplied as affinity purified IgG in phosphate buffered saline containing 1 mg/mL bovine serum albumin and 0.05% sodium azide.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20°C. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a minimum working antibody concentration of 0.2 µg/mL is recommended using CHO whole cell lysate.

Indirect immunofluorescence: a minimum working antibody concentration of 2 µg/mL is recommended using KK1 granulosa cells.

Immunohistochemistry: a minimum working antibody concentration of 0.2 µg/mL is recommended using paraffin-embedded sections of murine prenatal follicle.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Pisarska, M.D., et al., Forkhead L2 is expressed in the ovary and repressed the promoter activity of the steroidogenic acute regulatory gene. *Endocrinology*, 145, 3424-3433 (2004).
2. Loffler, K.A., et al., Etiology of ovarian failure in blepharophimosis ptosis epicanthus inversus syndrome: FOXL2 is a conserved, early-acting gene in vertebrate ovarian development. *Endocrinology*, 144, 3237-3243 (2003).

3. Cocquet, J., et al., Structure, evolution and expression of the FOXL2 transcription unit. *Cytogenet. Genome Res*., 101, 206-211 (2003).

4. Cocquet, J., et al., Evolution and expression of FOXL2. *J. Med. Genet*., 39, 916-922 (2002).

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